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EXAMINER

NGUYEN, SANG H

ART UNIT

PAPER NUMBER

2877

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Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/998,492

Applicant(s)

FRUMUSA ET AL.

Examiner

Sang H Nguyen

Art Unit

2877

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 29 January 2002.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All   b) ☐ Some \*   c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

Art Unit: 2877

## **DETAILED ACTION**

### ***Information Disclosure Statement***

1. This office acknowledges of the following items from the Applicant: Information Disclosure Statement (IDS) file on 01/29/02 is received and made of record as Paper # 4. The references cited on the PTOL 1449 form have been considered.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 9 and 14-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 9; the limitation "wherein the light is structured by a first, 360 degree light structuring aperture placed between said light source and said lens" is indefinite and unclear what does applicant means " the light is structured by a first, 360 degree light structuring aperture"?.

Regarding claim 14; the limitation "a second, 360 degree light structuring aperture placed between said light source and said lens" is indefinite and unclear what does applicant means "a second, 360 degree light structuring aperture"?.

Art Unit: 2877

Regarding claim 15; the limitation "the second, 360 degree light structuring aperture is formed by spaced" is indefinite and unclear what does applicant means "the second, 360 degree light structuring aperture is formed by spaced"?.

Regarding claim 16; the "configured to structure light from said light source" is indefinite and unclear, what does applicant mean "configured to structure light from said light source"?.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claim 16 is rejected under 35 U.S.C. 102(b) as being anticipated by Ebel et al (U.S. Patent No. 5,812,254).

Regarding claim 16; Ebel et al discloses an assembly for inspecting an ophthalmic lens, comprising:

\* a light source (50,52,58 of figure 1 and col.5 line 2) for directing emitting light the ophthalmic lens (40 of figure 1);

\* an annular light aperture structure (42 of figure 1) having an open center (46 of figure 1), wherein the annular light aperture for emitting light into the opening center (see figure 1);

Art Unit: 2877

\* a lens holder (36 of figure 1) for removably engaging and positioning the ophthalmic lens (40 of figure 1) in the opening center (46 of figure 1) of the annular light aperture structure (42 of figure 1) whereby the emitted light impinges upon the ophthalmic lens (40 of figure 1).

See figure 1.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-15 and 17-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ebel et al (U.S. Patent No. 5,812,254) in view of Sprague (U.S. Patent No. 3,988,068).

Regarding claims 1-2, 5-6, 9-13, 15, 17-20, and 24-27; Ebel et al discloses a method and an assembly for inspecting an ophthalmic lens, comprising:

\* a light source (50,52,58 of figure 1 and col.5 line 2) for directing emitting light to the ophthalmic lens (40 of figure 1);

\* an annular light aperture structure (42 of figure 1) having an open center (46 of figure 1), wherein the annular light aperture for emitting light into the opening center (see figure 1);

\* a lens holder (36 of figure 1) for removably engaging and positioning the ophthalmic lens (40 of figure 1) in the opening center (46 of figure 1) of the annular light aperture structure

Art Unit: 2877

(42 of figure 1) whereby the emitted light impinges upon the ophthalmic lens (40 of figure 1).

See figure 1.

Ebel et al is shown to teach all of features of claimed invention except for the emitted light enters ophthalmic lens along the entire 360 degrees in periphery edge of ophthalmic lens and the emitted light is internally reflected light within the ophthalmic lens such that clear areas of ophthalmic lens appear a dark signal to an imaging device and reflected scattered light at points of markings or defects of ophthalmic lens appear a bright signal to the imaging device. However, Sprague shows that it is known in the art to provide the light source is an LED array (60a,60b of figure 4 and col.7 lines 38-41 or 11 of figure 1) for directing emitted light (14 of figure 1) enters ophthalmic lens (10 of figures 1 and 4) along the entire 360 degrees in periphery edge of ophthalmic lens (10 of figure 2) and the emitted light ((14 of figure 1) is internally reflected light within the ophthalmic lens (col.8 lines 8-11) such that clear areas of ophthalmic lens is considered as the absence of any defect in ophthalmic lens (10 of figure 4) appear a dark signal is considered a no light or signal to an imaging device (62 of figure 4 and col.8 lines 11-13) and reflected scattered light (32, 34 of figure 2) at points of markings or defects (37,38 of figure 1) of ophthalmic lens (10 of figure 1) appear a bright signal is considered as the defects is present in ophthalmic lens (10 of figure 1 and col.8 line 13-18) to the imaging device (62 of figure 4) and wherein ophthalmic lens behaving as a fiber optic conduit to be inherent as shown in figures 1 and 4. See figures 1-4.

Art Unit: 2877

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify method and assembly for inspecting an ophthalmic lens of Ebel et al with above limitations as taught by Sprague's method and apparatus for detecting defect in ophthalmic lens for the purpose of detecting and analyzing defects, scratches, bubbles, or other surface or subsurface defects in ophthalmic lens.

Regarding claims 3-4; Sprague discloses comparing the image received by the imaging device with a predetermined set of threshold values is considered as a set of tolerance standards (col.5 lines 37-43) and a processing electronic for determining (23 of figure 2 and 69 of figure 4) whether the ophthalmic lens (10 of figure 1) has passed or fail inspection. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify method and assembly for inspecting an ophthalmic lens of Ebel et al with a computer or processing electronic for comparing and determining defects in ophthalmic lens with a predetermined set of threshold values as shown in the method and device of Sprague for the purpose of detecting and analyzing defects, scratches, bubbles, or other surface or subsurface defects in ophthalmic lens.

Regarding claims 7-8 and 21-23; Ebel et al discloses wherein diffusing (68 ) the light prior to the emitted light entering ophthalmic lens (40) and light source is a fiber optic (figure 1).

Regarding claim 14; Ebel et al is shown to teach all of the features of the claimed invention except for the ophthalmic lens inspection includes opposite concave and convex surfaces. However, Sprague shows that it is known in the art to provide the ophthalmic lens (10

Art Unit: 2877

of figure 1) inspection includes opposite concave and convex surfaces (12,13 of figure 1). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify method and assembly for inspecting an ophthalmic lens of Ebel et al with opposite concave and convex surfaces of the ophthalmic lens as shown in the method and device of Sprague for the purpose of detecting and analyzing defects, scratches, bubbles, or other surface or subsurface defects in ophthalmic lens.

### ***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Lafferty et al (5,818,573) discloses ophthalmic lens inspection system; Smith et al (5,100,232) discloses apparatus and method for detecting hidden marks on progressive aspheric ophthalmic lenses; Smith, Jr. discloses method and apparatus inspecting surface treated ophthalmic lenses; Ebel et al discloses ophthalmic lens inspection method and apparatus; and Ebel et al discloses lens inspection system and method .

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Sang Nguyen whose telephone number (703)308-6426. The examiner can normally be reached on Monday through Friday from 8:30 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Frank Font, can be reached on (703)308-4881. The fax phone number for the organization where this application or proceeding is assigned is (703)308-7722 or 7724.



Application/Control Number: 09/998,492

Page 8

Art Unit: 2877

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0956.

SN  
Nguyen/ sn

August 15, 2002

  
Frank G. Font  
Supervisory Patent Examiner  
Technology Center 2800